1 GAATTCCAGGCTGCTAGGAAGTGAAAAGTGAACCTGGACCCAGCTCAGCGGCAGCAGCAG 60

61 CGGCAGCAGGCAGCAGCCTCTATCCTCTCCTCCAGCCACATGGGCCCCCGGATGGCGCTT 120
MetGlyProArgMetAlaLeu

121 CCCCGCGTGCTCCTGCTCCTGTTCTTGCACCTGTTGCTGCTAGGATGCCGTTCCCATCCA 180
ProArgValLeuLeuLeuLeuPheLeuHisLeuLeuLeuLeuGlyCysArgSerHisPro
eProAlaCysSerCysSerCysSerCysThrCysCysCysEndAspAlaValProIleHi
erProArgAlaProAlaProValLeuAlaProValAlaAlaArgMetProPheProSerT

181 CTGGGTGGCGCTGGCCTGGCCTCAGAACTGCCAGGGATACAGGTGAGCCCTGATGAACTG 240
LeuGlyGlyAlaGlyLeuAlaSerGluLeuProGlyIleGlnValSerProAspGluLeu
sTrpValAlaLeuAlaTrpProGlnAsnCysGlnGlyTyrArgEndAlaLeuMetAsnCy
hrGlyTrpArgTrpProGlyLeuArgThrAlaArgAspThrGlyGluProEndEndThrA

241 CTTAGACTTGGTTGGCTGGGAGGGCGCGGACAGCAGCAACTAACGGGTCCCCACCTACTG 300
LeuArgLeuGlyTrpLeuGlyGlyArgGlyGlnGlnGlnLeuThrGlyProHisLeuLeu
sLeuAspLeuValGlyTrpGluGlyAlaAspSerSerAsnEndArgValProThrTyrCy
laEndThrTrpLeuAlaGlyArgAlaArgThrAlaAlaThrAsnGlySerProProThrV

301 TTCCAAGAGGGCTCTAACCTCCTTTGGGAACTAGTGATAAGGGGTTTAGAAGGCAGCCAG 360
PheGlnGluGlySerAsnLeuLeuTrpGluLeuValIleArgGlyLeuGluGlySerGln
sSerLysArgAlaLeuThrSerPheGlyAsnEndEndEndGlyValEndLysAlaAlaAr
alProArgGlyLeuEndProProLeuGlyThrSerAspLysGlyPheArgArgGlnProG

361 GCTGGGGGTGAGGACCCGCTCCCAAGGCAGTTGGTTCGCTTCAGCACCATCAAGAGTGAT 420
AlaGlyGlyGluAspProLeuProArgGlnLeuValArgPheSerThrIleLysSerAsp
gLeuGlyValArgThrArgSerGlnGlySerTrpPheAlaSerAlaProSerArgValMe
lyTrpGlyEndGlyProAlaProLysAlaValGlySerLeuGlnHisHisGlnGluEndT

421 GGGTCCAGGTGCGAGTTCCTGAGGCTCGGGCTCCCCCACCCATCCCAGGAGCTGCTGGAC 480
GlySerArgCysGluPheLeuArgLeuGlyLeuProHisProSerGlnGluLeuLeuAsp
tGlyProGlyAlaSerSerEndGlySerGlySerProThrHisProArgSerCysTrpTh
rpValGlnValArgValProGluAlaArgAlaProProProIleProGlyAlaAlaGlyP

481 CGCCTGCGAGACAGGGTCTCCGAGCTGCAGGCGACGGGACGGACCTGGAGCCCCTCCGGC 540
ArgLeuArgAspArgValSerGluLeuGlnAlaThrGlyArgThrTrpSerProSerGly
rAlaCysGluThrGlySerProSerCysArgArgArgAspGlyProGlyAlaProProAl
roProAlaArgGlnGlyLeuArgAlaAlaGlyAspGlyThrAspLeuGluProLeuArgG

541 AGGACCGTGGCCTCACAGAAGCCTGGGAGGCGAGGGAAGCAGCCCCCACGGGGGTTCTTG 600
ArgThrValAlaSerGlnLysProGlyArgArgGlyLysGlnProProArgGlyPheLeu
aGlyProTrpProHisArgSerLeuGlyGlyGluGlySerSerProHisGlyGlySerTr
lnAspArgGlyLeuThrGluAlaTrpGluAlaArgGluAlaAlaProThrGlyValLeuG

FIGURE 1

```
601  GGCCCCGCAGTAGCATCTTCCAAGTCCTCCGGGGAATACGCAGCCCCAAGACGATGCGTG   660
     GlyProAlaValAlaSerSerLysSerSer
     pAlaProGlnEndHisLeuProSerProPro
     lyProArgSerSerIlePheGlnValLeuArgGlyIleArgSerProLysThrMetArgA

661  ACTCTGGCTGCTTTGGGCGGAGGCTGGACCGGATCGGCTCCCTCAGCGGCCTGGGCTGCA   720
     spSerGlyCysPheGlyArgArgLeuAspArgIleGlySerLeuSerGlyLeuGlyCysA

721  ATGGTGAGCACCCACCCCATTCCCACTGCACGCCCCGGTTAGCATCACTTCTGGGTTTGA   780
     snV

781  TGTCTCTGGGACCAAACTCCGAGAAAAGGACACCTGGATATCACTCTTTCTTGTTGCCAG   840

841  TCCTCAAGGCCAAGGAGCGCCTTCCTGGAAAAATTAAATTTGGACAGCATTCACTAGCAT   900

901  GACTATGAGTCCCCACCCACCTTCTCGCCACCCCCTGCCTCTCTCACCCAAGGCGGCAGA   960

961  ATTACTTTAGGATGTAAATTCTGTCATTGCCTGGCTGCCGCTCCTGGGAGCAAAAAGAGA   1020

1021 ACTAAACCTCTTCCCCCTGGTTTCCCCTCAACTGTCTGTGGCTGCAAAGGCAGAGGGCAG   1080

1081 GATCACCAGGGTGATGACAAGTCCCAGCTTACAAGGAGGAAACTCAGGTCCAGAGAGATG   1140

1141 GATTATCCCAAAGCCCCAAACATCCAGTTCTGCTGAAGAAGGCGGGTGGCAGGGGTGGCA   1200

1201 CGTGGTGGGGGGAAGCCCAGGTCCTGCCTGCCTCTCACCCTAATGTCATCCTCACCCTCT   1260

1261 CTCTCCCCCCCACAGTGCTCAGGAGGTACTGAGAAGTCCTGGCTGACAACCTCTGTGTCC   1320
                     alLeuArgArgTyr***

1321 GCTTCTCCAACGCCCCTCCCCTGCTCCCCTTCAAAGCAACTCCTGTTTTTATTTATGTAT   1380

1381 TTATTTATTTATTTATTTGGTGGTTGTATATAAGACGGTTCTTATTTGTGAGCACATTTT   1440

1441 TTCCATGGTGAAATAAAGTCAACATTAGAGCTCTGTCTTTTGAAAAAAAAAAAAAAAGGA   1500

1501 ATTC   1504
```

FIGURE 1 (Cont)

Fig. 2: BNP Screening Oligos

```
5'-TCCAGCTGCTTCGGGGGCAGGATGGACAGGATTGGAGCCCAGAGCGGACTGGGCTGTAAC-3'  human ANP
   SerSerCysPheGlyGlyArgMetAspArgIleGlyAlaGlnSerGlyLeuGlyCysAsn-3'  human ANP
   (2)                                                  (21)
   SerGlyCysPheGlyArgArgLeuAspArgIleGlySerLeuSerGlyLeuGlyCysAsn     pig BNP
5'-ACNGGNTGCTTGGGNCGNCGNCTNGACCGNATNGGNTCNCTNTCNGGNCTNGGNTGCAAC-3'  Pig BNP
   TG       T  A    A  A  T    TA        AG T  AG    T      T  T

3'-AGGCCGACGAAGCCCGCGTCCGACCTGTCCTAACCTAGGGACTCGCCTGACCCGACATTG-5'  3351  (minimal)

3'-TCGCCGACGAAGCCGTCTTCTGAGCTGTCTTAGCCGTCGGAGTCGCCGGAGCCGACGTTG-5'  3352  (G/T pref)

3'-AGGTCGACGAAGCCCCCGTCCTACCTGTCCTAACCTCGGGTCTCGCCTGACCCGACATTG-5'  3376  (ANP)
```

FIGURE 2

Fig. 2: hn BNP cDNA (10-13-88)

```
   1  GAATTCCAGGCTGCTAGGAAGTGAAAAGTGAACCTGGACCCAGCTCAGCGGCAGCAGCAGCGGCAGCAGG    70

  71  CAGCAGCCTCTATCCTCTCCTCCAGCCACATGGGCCCCCGGATGGCGCTTCCCCGCGTGCTCCTGCTCCT   140
                                     MetGlyProArgMetAlaLeuProArgValLeuLeuLeuLe

 141  GTTCTTGCACCTGTTGCTGCTAGGATGCCGTTCCCATCCACTGGGTGGCGCTGGCCTGGCCTCAGAACTG   210
      uPheLeuHisLeuLeuLeuLeuGlyCysArgSerHisProLeuGlyGlyAlaGlyLeuAlaSerGluLeu
                                       -1 +1                          10
 211  CCAGGGATACAGGTGAGCCCTGATGAACTGCTTAGACTTGGTTGGCTGGGAGGGCGCGGACAGCAGCAAC   280
      ProGlyIleGln

 281  TAACGGGTCCCCACCTACTGTTCCAAGAGGGCTCTAACCTCCTTTGGGAACTAGTGATAAGGGGTTAGAA   350

 351  GGCAGCCAGGCTGGGGGTGAGGACCCCGCTCCCAAGGCAGTTGGTTCGCTTCAGCACCATCAAGAGTGAT   420

 421  GGGTCCAGGTGCGAGTTCCTGAGGCTCGGGCTCCCCCACCCATCCCAGGAGCTGCTGGACCGCCTGCGAG   490
                                                        GluLeuLeuAspArgLeuArgA
                                                                      20.
 491  ACAGGGTCTCCGAGCTGCAGGCGGAGCGGACGGACCTGGAGCCCCTCCGGCAGGACCGTGGCCTCACAGA   560
      spArgValSerGluLeuGlnAlaGluArgThrAspLeuGluProLeuArgGlnAspArgGlyLeuThrGl
                 30.                        40.
 561  AGCCTGGGAGGCGAGGGAAGCAGCCCCCACGGGGGTTCTTGGCCCCGCAGTAGCATCTTCCAAGTCCTC   630
      uAlaTrpGluAlaArgGluAlaAlaProThrGlyValLeuGlyProArgSerSerIlePheGlnValLeu
         50.                        60.                               70.
 631  CGGGGAATACGCAGCCCCAAGACGATGCGTGACTCTGGCTGCTTTGGGCGGAGGCTGGACCGGATCGGCT   700
      ArgGlyIleArgSerProLysThrMetArgAspSerGlyCysPheGlyArgArgLeuAspArgIleGlyS
              ↑1            80.↑2                          90.
 701  CCCTCAGCGGCCTGGGCTGCAATGGTGAGCACCCACCCCCATTCCCACTGCACGCCCCGGTTAGCATCAC   770
      erLeuSerGlyLeuGlyCysAsnV
                 100
 771  TTCTGGGTTTGATGTCTCTGGGGACCAAACTCCGAGAAAAGGACACCTGGATATCACTCTTTCTTGTTGC   840

 841  CAGTCCTCAAGGCCAAGGAGCGCCTTCCTGGAAAAATTAAATTTGGACAGCATTCACTAGCATGACTATG   910

 911  AGTCCCCACCCACCTTCTCGCCACCCCCTGCCTCTCTCACCCAAGGCGGCAGAATTACTTTAGGATGTAA   980

 981  ATTCTGTCATTGCCTGGCTGCCGCTCCTGGGAGCAAAAAGAGAACTAAACCTCTTCCCCCTGGTTTCCCC  1050

1051  TCAACTGTCTGTGGCTGCAAAGGCAGAGGGCAGGATCACCAGGGTGATGACAAGTCCCAGCTTACAAGGA  1120

1121  GGAAACTCAGGTCCAGAGAGATGGATTATCCCAAAGCCCCAAACATCCAGTTCTGCTGAAGAAGGCGGGT  1190

1191  GGCAGGGGTGGCACGTGGTGGGGGGAAGCCCAGGTCCTGCCTGCCTCTCACCCTAATGTCATCCTCACCC  1260

1261  TCTCTCTCCCCCCCACAGTGCTCAGGAGGTACTGAGAAGTCCTGGCTGACAACCTCTGTGTCCGCTTCTC  1330
                        alLeuArgArgTyr***
                                 106
1331  CAACGCCCCTCCCCTGCTCCCCTTCAAAGCAACTCCTGTTTTTATTTATGTATTTATTTATTTATTTATT  1400

1401  TGGTGGTTGTATATAAGACGGTTCTTATTTGTGAGCACATTTTTTCCATGGTGAAATAAAGTCAACATTA  1470

1471  GAGCTCTGTCTTTTGAAAAAAAAAAAAAAAGGAATTC   1507
```

Figure 3

Mature Pig BNP cDNA (10-13-88)

1 GAATTCCAGGCTGCTAGGAAGTGAAAAGTGAACCTGGACCCAGCTCAGCGGCAGCAGCAGCGGCAGCAGG 70

71 CAGCAGCCTCTATCCTCTCCTCCAGCCACATGGGCCCCCGGATGGCGCTTCCCCGCGTGCTCCTGCTCCT 140
MetGlyProArgMetAlaLeuProArgValLeuLeuLeuLe

141 GTTCTTGCACCTGTTGCTGCTAGGATGCCGTTCCCATCCACTGGGTGGCGCTGGCCTGGCCTCAGAACTG 210
uPheLeuHisLeuLeuLeuLeuGlyCysArgSerHisProLeuGlyGlyAlaGlyLeuAlaSerGluLeu

↓1

211 CCAGGGATACAGGAGCTGCTGGACCGCCTGCGAGACAGGGTCTCCGAGCTGCAGGCGGAGCGGACGGACC 280
ProGlyIleGlnGluLeuLeuAspArgLeuArgAspArgValSerGluLeuGlnAlaGluArgThrAspL

281 TGGAGCCCCTCCGGCAGGACCGTGGCCTCACAGAAGCCTGGGAGGCGAGGGAAGCAGCCCCCACGGGGGT 350
euGluProLeuArgGlnAspArgGlyLeuThrGluAlaTrpGluAlaArgGluAlaAlaProThrGlyVa

351 TCTTGGGCCCCGCAGTAGCATCTTCCAAGTCCTCCGGGGAATACGCAGCCCCAAGACGATGCGTGACTCT 420
lLeuGlyProArgSerSerIlePheGlnValLeuArgGlyIleArgSerProLysThrMetArgAspSer

↓2

421 GGCTGCTTTGGGCGGAGGCTGGACCGGATCGGCTCCCTCAGCGGCCTGGGCTGCAATGTGCTCAGGAGGT 490
GlyCysPheGlyArgArgLeuAspArgIleGlySerLeuSerGlyLeuGlyCysAsnValLeuArgArgT

491 ACTGAGAAGTCCTGGCTGACAACCTCTGTGTCCGCTTCTCCAACGCCCCTCCCCTGCTCCCCTTCAAAGC 560
yr***

561 AACTCCTGTTTTTATTTATGTATTTATTTATTTATTTATTTGGTGGTTGTATATAAGACGGTTCTTATTT 630

631 GTGAGCACATTTTTTCCATGGTGAAATAAAGTCAACATTAGAGCTCTGTCTTTTGAAAAAAAAAAAAAAA 700

701 GGAATTC 707

Figure 4

Dog BNP Gene 12-12-88

```
   1  CGATCAGGGATGTTGGGGCGGAGGAAACGGAGGGAAGGAGGGAGCGGAGGAGGCCCGAGGACTGTTGGTG    70
  71  TCCCCCTCCTGCCCTTTTGGGGCCAGGCCCACTTCTATACAAGGCCTGCTCTCCAGCCTCCACCCCGGCG   140
 141  GGTATGGTGCAGGCGCGGAGGGGCGCATTCCCCCGCCCTGAGCTCAGCGGCCGGAATGCGGCCGATAAAT   210
 211  CAGAGATAACCCCAGGCGCGGGATAAGGGATAAAAAGCCCCCGTTGCCGCGGGATCCAGGAGAGCACCCG   280
 281  CGCCCCAAGCGGTGACACTCGACCCCGGTCGCAGCGCAGCAGCTCAGCAGCCGGACGTCTCTTTCCCCAC   350
 351  TTCTCTCCAGCGACATGGAGCCCTGCGCAGCGCTGCCCCGGGCCCTCCTGCTCCTCCTGTTCTTGCACCT   420
                    MetGluProCysAlaAlaLeuProArgAlaLeuLeuLeuLeuLeuPheLeuHisLe
 421  GTCGCCACTCGGAGGCCGCCCCCACCCGCTGGGCGGCCGCAGCCCCGCCTCGGAAGCCTCGGAAGCCTCA   490
      uSerProLeuGlyGlyArgProHisProLeuGlyGlyArgSerProAlaSerGluAlaSerGluAlaSer
 491  GAAGCCTCGGGGTTGTGGGCCGTGCAGGTGAGCGCTCAGCCTGCCTGAAGGCCGCGGCGGGTGGCAGCAG   560
 561  GTCACGGGGGCTTAGCCACTGTCCCAAGTCCTCAGTCTCCCTTGGGAATTAGTGATAAGGGAATCAGAAA   630
 631  GTGACGAGATTGGGTGCCAGGACTCCATACCCAAGGCGGCGGCTTCACTTGGGTGCAAGGGTGGTTCCGC   700
 701  CCCGGCGTGGGTTCCTGAGGCTCAGGCCGTCCATTGCAGGAGCTGCTGGGCCGTCTGAAGGACGCAGTTT   770
                                                GluLeuLeuGlyArgLeuLysAspAlaValS
 771  CAGAGCTGCAGGCAGAGCAGTTGGCCCTGGAACCCCTGCACCGGAGCCACAGCCCCGCAGAAGCCCCGGA   840
      erGluLeuGlnAlaGluGlnLeuAlaLeuGluProLeuHisArgSerHisSerProAlaGluAlaProGl
 841  GGCCGGAGGAACGCCCCGTGGGGTCCTTGCACCCCATGACAGTGTCCTCCAGGCCCTGAGAAGACTACGC   910
      uAlaGlyGlyThrProArgGlyValLeuAlaProHisAspSerValLeuGlnAlaLeuArgArgLeuArg
 911  AGCCCCAAGATGATGCACAAGTCAGGGTGCTTTGGCCGGAGGCTGGACCGGATCGGCTCCCTCAGTGGCC   980
      SerProLysMetMetHisLysSerGlyCysPheGlyArgArgLeuAspArgIleGlySerLeuSerGlyL
 981  TGGGCTGCAATGGTAAGCCGCCTCCCTGCCGCCTTGGCTCCCCCTCCCCAGCCCCCTGGGTTCGACCCTT  1050
      euGlyCysAsnV
1051  GGAACCCCTTCTGGGTTTGTTGTCTCGGGGGATCACACTCTGAGGAAAGGACATCTGGACATCGCTCCTT  1120
1121  CTTGCTGACAGTCCTAAGGGCCAAGGAGTACGTTTCTGGAAATACTACGTGTGGACATCGTTGTCCAGGG  1190
1191  TCCCTACCCACCTCCTAGCCCCCTCCTGCCTCTCGCACCCAAAGGGCAGAATCATCTTAGGATGGAATCA  1260
1261  GTCGTTGTCTGGAAGCATCTCCTTGGAGCAGAAAGAGTCCTAAACATCGTCCTCGTAGCTCTCTCTGTCT  1330
1331  GTCTGTAGCCACGAAGGCAGAGGTCAGGGTCACCAGGGCAGTGATGATTCCCAGTTAACAGAGGAGGAGA  1400
1401  CTGAGGTCTAGAGAGATGGATTATTCCAAAGCCTCAAACATCCAGATCGGCTGAGGGTGGGGTTGGTGGC  1470
1471  AGGGATGGCTCCTGGGCTTGGGAAGCTCGGATCCTGCCTCAGTCTCCCACCTGACGCCATCATCCCCCTC  1540
1541  TCTCTCCTCCCACAGTGCTGAGAAAGTATTAAGGAGGAAGTCCCGACTGCCCACATCTGCATTGGATTCT  1610
```

Figure 5

alLeuArgLysTyr***

1611 TCAGCAGCCCCTGAGCCCCTTGGAAGCAGATCTTATTTATTCGTATTTATTTATTTATTTATTTCGATTG 1680

1681 TTTTATATAAGATGATCCTGACGCCCGAGCACGGATTTTCCACGGTGAAATAAAGTCAACCTTAGAGCTT 1750

1751 CTTTTGAAACCGATTTGTCCCTGTGCATTAAAAGTAACACATCATTTAAAAAAA 1804

Fig 5 (cont)

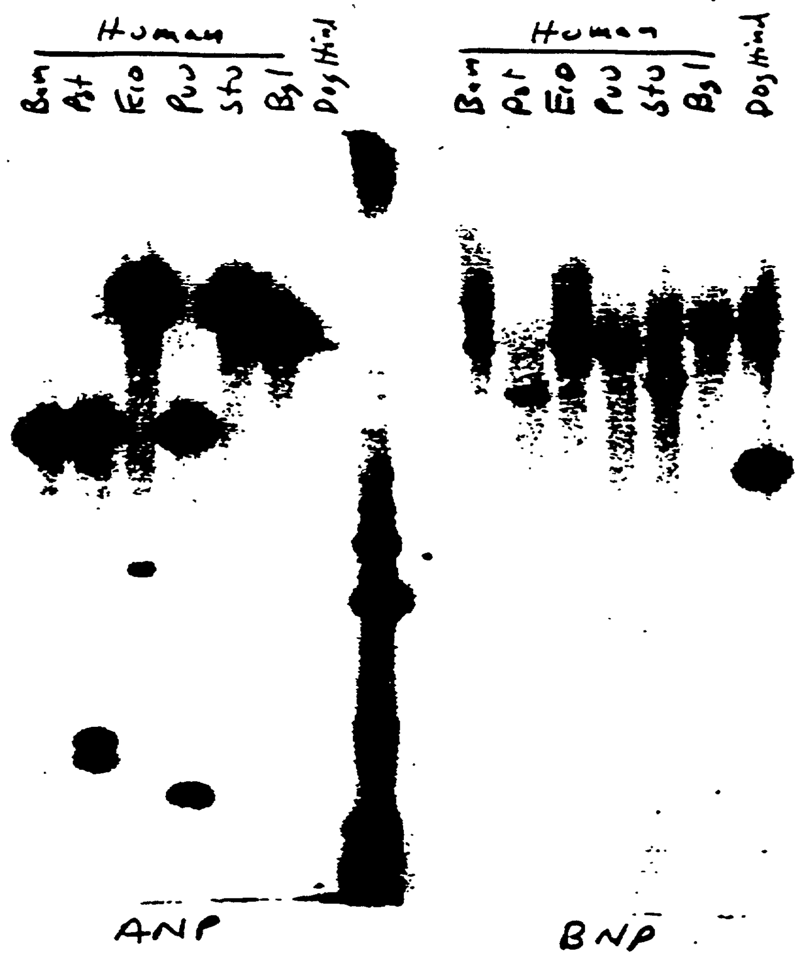

Figure 6

Human BNP Gene 12-12-88

```
   1  CCCACGGTGTCCCGAGGAGCCAGGAGGAGCACCCCGCAGGCTGAGGGCAGGTGGGAAGCAAACCCGGACG    70

  71  CATCGCAGCAGCAGCAGCAGCAGCAGAAGCAGCAGCAGCAGCCTCCGCAGTCCCTCCAGAGACATGGATC   140
                                                                        MetAspP

 141  CCCAGACAGCACCTTCCCGGGCGCTCCTGCTCCTGCTCTTCTTGCATCTGGCTTTCCTGGGAGGTCGTTC   210
      roGlnThrAlaProSerArgAlaLeuLeuLeuLeuLeuPheLeuHisLeuAlaPheLeuGlyGlyArgSe

 211  CCACCCGCTGGGCAGCCCCGGTTCAGCCTCGGACTTGGAAACGTCCGGGTTACAGGTGAGAGCGGAGGGC   280
      rHisProLeuGlySerProGlySerAlaSerAspLeuGluThrSerGlyLeuGln

 281  AGCTCAGGGGGATTGGACAGCAGCAATGAAAGGGTCCTCACCTGCTGTCCCAAGAGGCCCTCATCTTTCC   350

 351  TTTGGAATTAGTGATAAAGGAATCAGAAAATGGAGAGACTGGGTGCCCTGACCCTGTACCCAAGGCAGTC   420

 421  GGTTCACTTGGGTGCCATGAAGGGCTGGTGAGCCAGGGGTGGGTCCCTGAGGCTTGGACGCCCCCATTCA   490

 491  TTGCAGGAGCAGCGCAACCATTTGCAGGGCAAACTGTCGGAGCTGCAGGTGGAGCAGACATCCCTGGAGC   560
         GluGlnArgAsnHisLeuGlnGlyLysLeuSerGluLeuGlnValGluGlnThrSerLeuGluP

 561  CCCTCCAGGAGAGCCCCCGTCCCACAGGTGTCTGGAAGTCCCGGGAGGTAGCCACCGAGGGCATCCGTGG   630
      roLeuGlnGluSerProArgProThrGlyValTrpLysSerArgGluValAlaThrGluGlyIleArgGl

 631  GCACCGCAAAATGGTCCTCTACACCCTGCGGGCACCACGAAGCCCCAAGATGGTGCAAGGGTCTGGCTGC   700
      yHisArgLysMetValLeuTyrThrLeuArgAlaProArgSerProLysMetValGlnGlySerGlyCys

 701  TTTGGGAGGAAGATGGACCGGATCAGCTCCTCCAGTGGCCTGGGCTGCAAAGGTAAGCACCCCCTGCCAC   770
      PheGlyArgLysMetAspArgIleSerSerSerSerGlyLeuGlyCysLysV

 771  CCCGGCCGCCTTCCCCCATTCCAGTGTGTGACACTGTTAGAGTCACTTTGGGGTTTGTTGTCTCTGGGAA   840

 841  CCACACTCTTTGAGAAAAGGTCACCTGGACATCGCTTCCTCTTGTTAACAGCCTTCAGGGCCAAGGGGTG   910

 911  CCTTTGTGGAATTAGTAAATGTGGGCTTATTTCATTACCATGCCCACAATACCTTCTCCCCACCTCCTAC   980

 981  TTCTTATCAAAGGGGCAGAATCTCCTTTGGGGGTCTGTTTATCATTTGGCAGCCCCCCAGTGGTGCAGAA  1050

1051  AGAGAACCAAACATTTCCTCCTGGTTTCCTCTAAACTGTCTATAGTCTCAAAGGCAGAGAGCAGGATCAC  1120

1121  CAGAGCAATGATAATCCCCAATTTACAGATGAGGAAACTGAGGCTCAGAGAGTTGCATTAAGCCTCAAAC  1190

1191  GTCTGATGACTAACAGGGTGGTGGGTGGCACACGATGAGGTAAGCTCAGCCCCTGCCTCCATCTCCCACC  1260

1261  CTAACCATCATCACCCTCTCTCTTTCCCTGACAGTGCTGAGGCGGCATTAAGAGGAAGTCCTGGCTGCAG  1330
                                        alLeuArgArgHis***

1331  ACACCTGCTTCTGATTCCACAAGGGGCTTTTTCCTCAACCCTGTGGCCCTCATCTTTCCTTTGGAATTAG  1400

1401  TGATAAAGGAATCAGAAAATGGAGAGACTGGGTGCCCTGACCCTGTACCCAAGGCAGTCGGTTCACTTGG  1470

1471  GTGCCATGAAGGGCCTGGTGAGCCAGGGGTTGGGTCCCTGAGGCTTTTA  1519
```

Figure 7

Pig PreproBNP
Dog PreproBNP
Human PreproBNP

```
                                             10                                                20
1  Met Gly Pro Arg Met Ala Leu Pro Arg Val Leu Leu Leu     Leu Phe Leu His Leu Leu Leu
2  --- Glu --- Cys Ala --- --- --- --- Ala --- --- --- Leu --- --- --- --- --- Ser Pro
3  --- Asp --- Gln Thr --- Pro Ser --- Ala --- --- --- --- --- --- --- --- --- Ala Phe
                                             30                                                40

   Leu Gly Cys Arg Ser His Pro Leu Gly Gly Ala Gly Leu Ala Ser Glu Leu Pro Gly Ile
   --- --- Gly --- Pro --- --- --- --- --- Arg Ser Pro --- --- --- Ala Ser Glu Ala
   --- --- Gly --- --- --- --- --- --- Ser Pro --- Ser --- --- Asp --- Glu Thr Ser
                       ↑SP

       ↓1                                    50                                            60
   Gln Glu Leu Leu Asp Arg Leu Arg Asp Arg Val Ser Glu Leu Gln Ala Glu Arg Thr Asp
   Ser --- --- --- Gly --- --- Lys --- Ala --- --- --- --- --- --- --- Gln Leu Ala
   Gly --- Gln Arg Asn His --- Gln Gly Lys Leu --- --- --- --- Val --- Gln --- Ser
      ↑Leu Gln

                                             70                                            80
   Leu Glu Pro Leu Arg Gln Asp Arg Gly Leu Thr Glu Ala Trp Glu Ala Arg Glu Ala Ala
   --- --- --- --- --- His Arg Ser His Ser Pro Ala --- --- Pro --- --- Gly Gly Thr
   --- --- --- --- Gln Glu Ser Pro Arg Pro --- Gly Val --- Lys Ser --- --- Val ---

                                             90                                           100
   Pro Thr Gly Val Leu Gly Pro Arg Ser Ser Ile Phe Gln Val Leu Arg Gly Ile Arg Ser
   --- Arg --- --- --- Ala --- His Asp --- Val Leu --- Ala --- --- Arg Leu --- ---
   Thr Glu --- Ile Arg Gly His --- Lys Met Val Leu Tyr Thr --- --- Ala Pro --- ---
                                                                               ↑1
                                            110                                           120
   Pro Lys Thr Met Arg Asp Ser Gly Cys Phe Gly Arg Arg Leu Asp Arg Ile Gly Ser Leu
   --- --- Met --- His Lys --- --- --- --- --- --- --- --- --- --- --- --- --- ---
   --- --- Met Val Gln Gly --- --- --- --- --- --- Lys Met --- --- --- Ser --- Ser
           ↑?          ↑2

                                            130 131
   Ser Gly Leu Gly Cys Asn Val Leu Arg Arg Tyr
   --- --- --- --- --- --- --- --- --- Lys ---
   --- --- --- --- --- Lys --- --- --- --- His
```

Figure 8